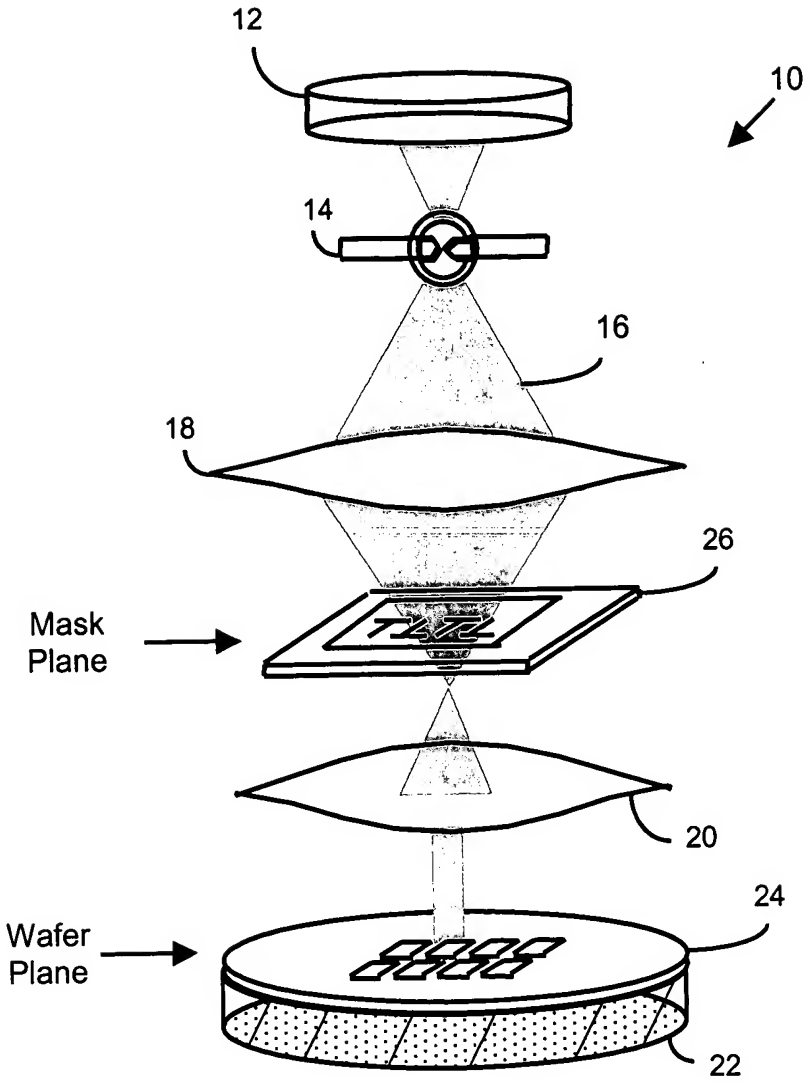


FIGURE 1

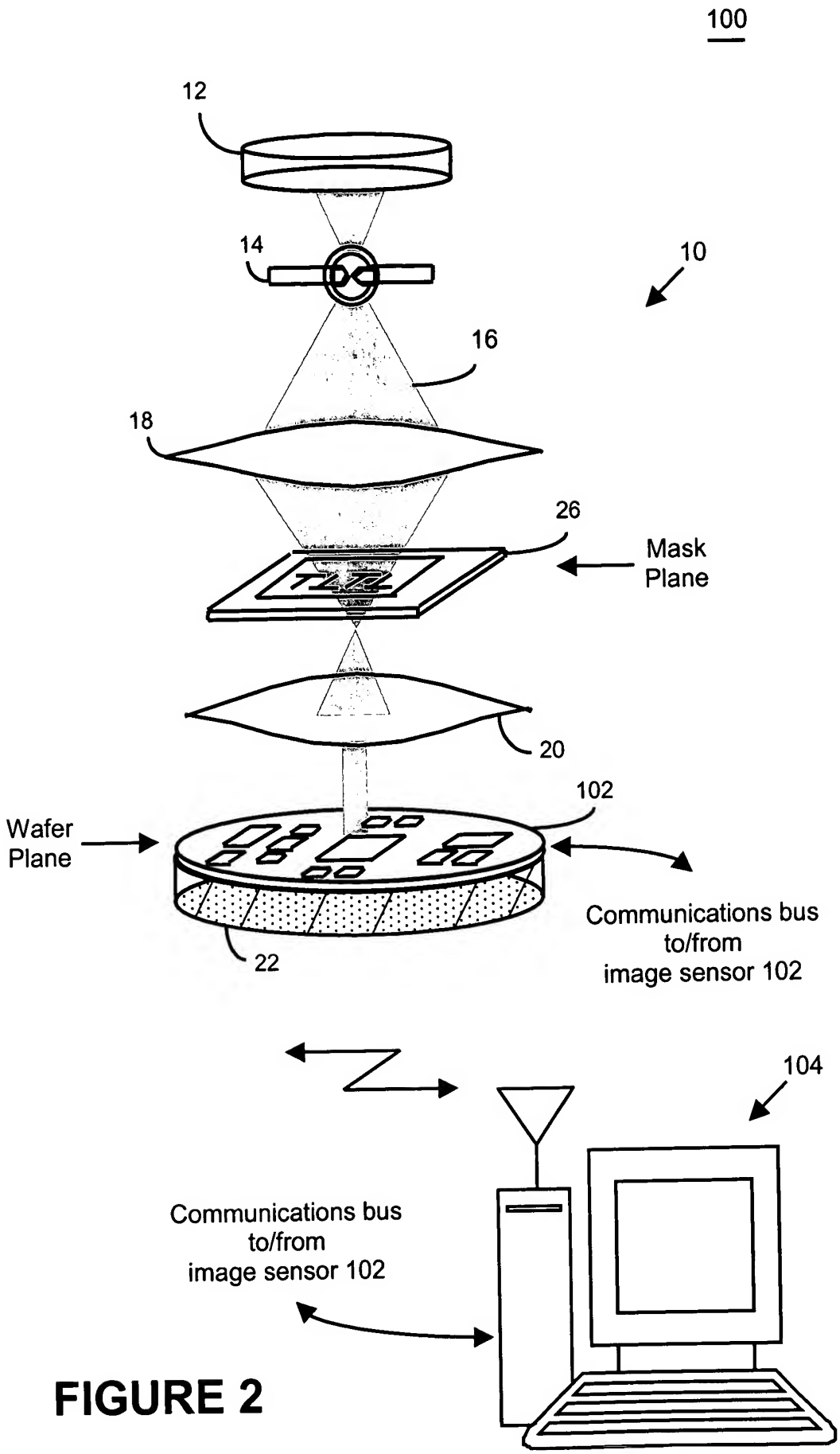

100
12
14
10
16
18
26
Mask
Plane
20
102
Wafer
Plane
Communications bus
to/from
image sensor 102
22
104
Communications bus
to/from
image sensor 102

FIGURE 2

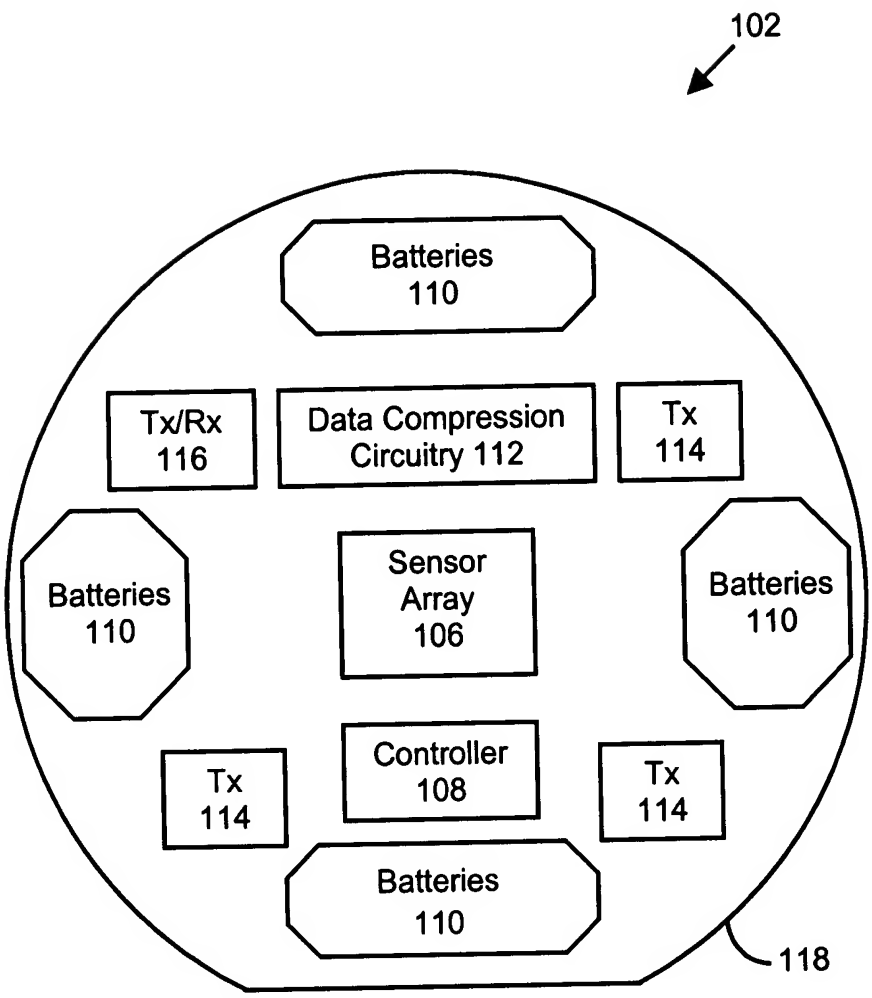

102
Batteries
110
Tx/Rx
116
Data Compression
Circuitry 112
Tx
114
Batteries
110
Sensor
Array
106
Batteries
110
Tx
114
Controller
108
Tx
114
Batteries
110
118

FIGURE 3A

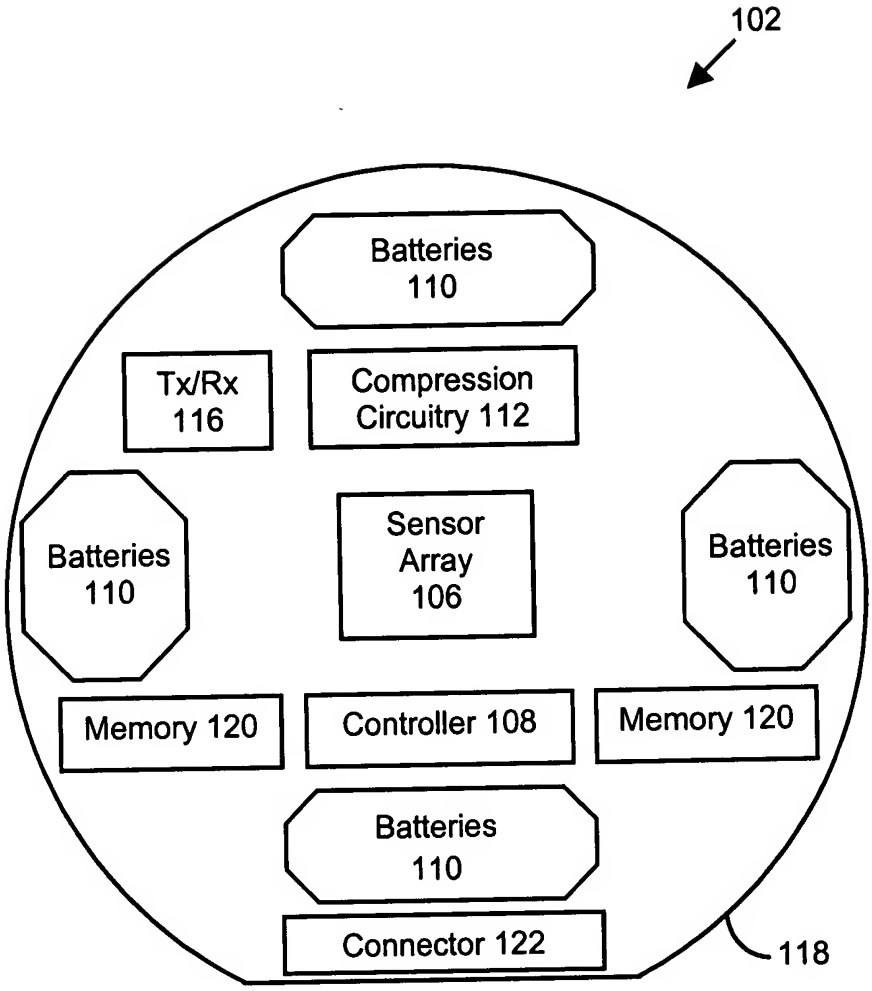

102
Batteries 110
Tx/Rx 116
Compression Circuitry 112
Batteries 110
Sensor Array 106
Batteries 110
Memory 120
Controller 108
Memory 120
Batteries 110
Connector 122
118

FIGURE 3B

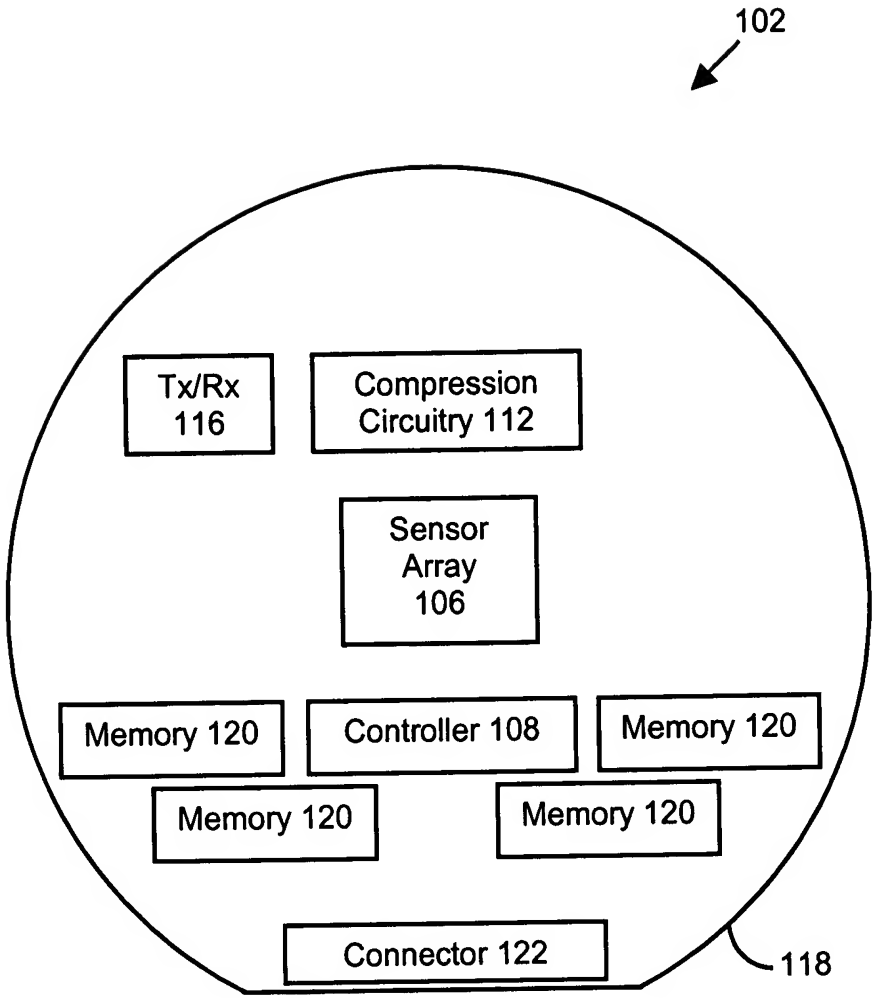

102
Tx/Rx
116
Compression
Circuitry 112
Sensor
Array
106
Memory 120
Controller 108
Memory 120
Memory 120
Memory 120
Connector 122
118

FIGURE 3C

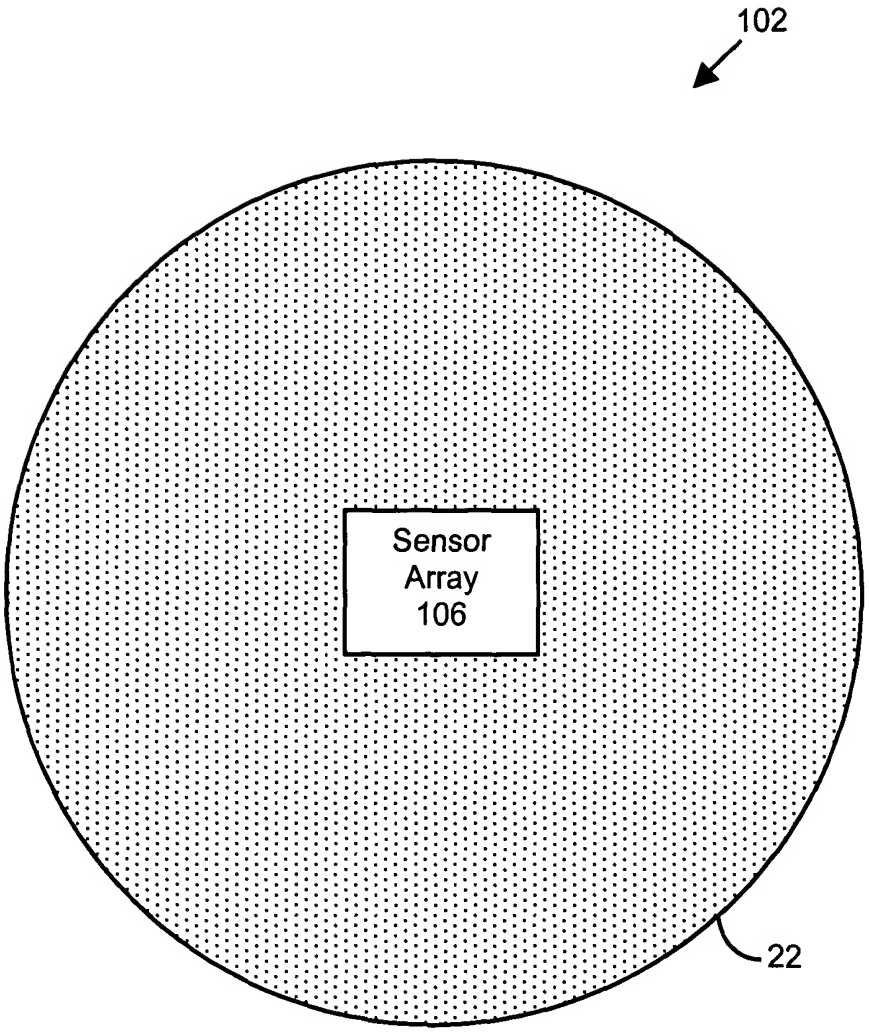


FIGURE 3D

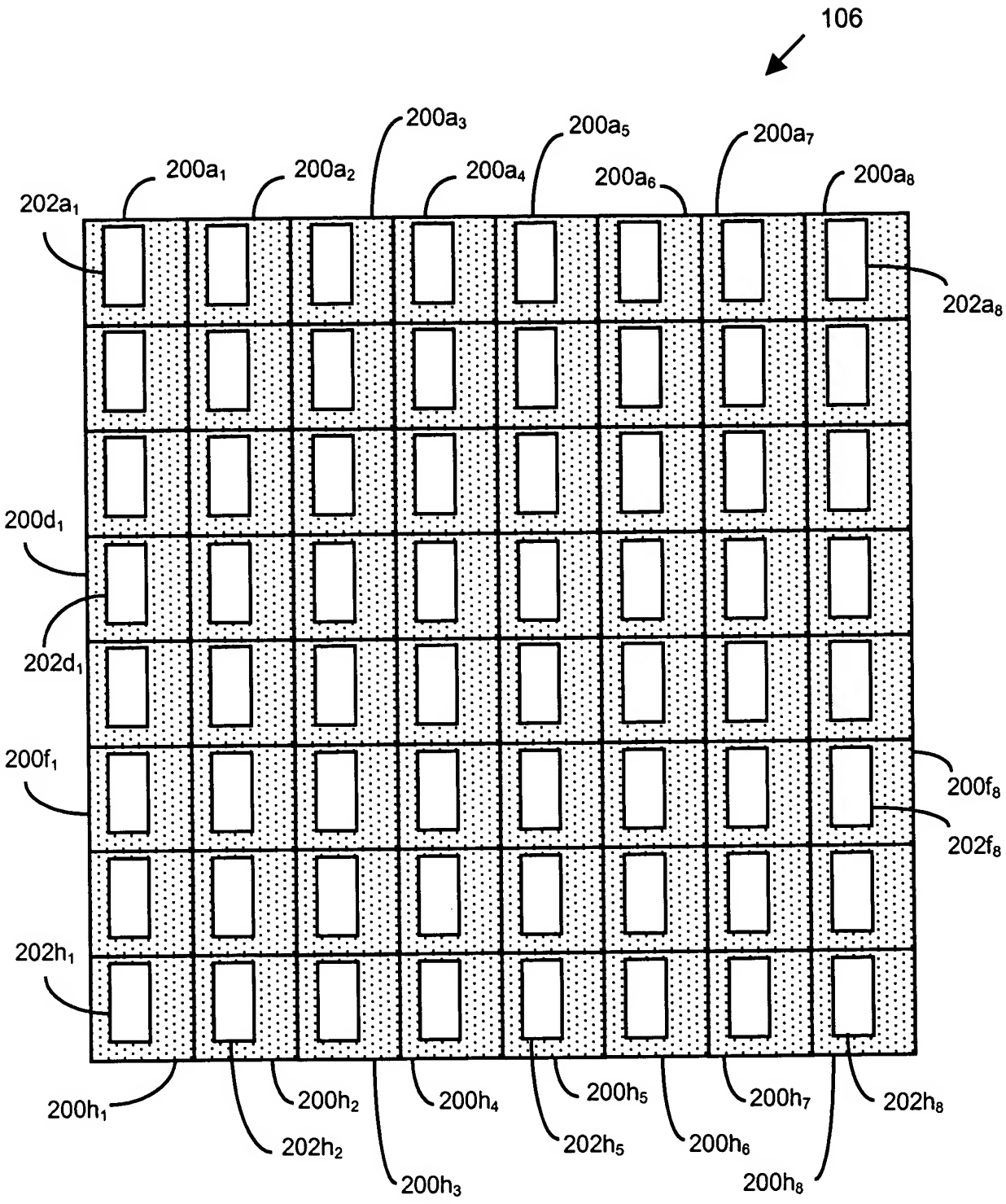

106
200a1
200a2
200a3
200a4
200a5
200a6
200a7
200a8
202a1
202a8
200d1
202d1
200f1
200f8
202f8
202h1
200h1
200h2
202h2
200h3
200h4
200h5
202h5
200h6
200h7
200h8
202h8

FIGURE 4

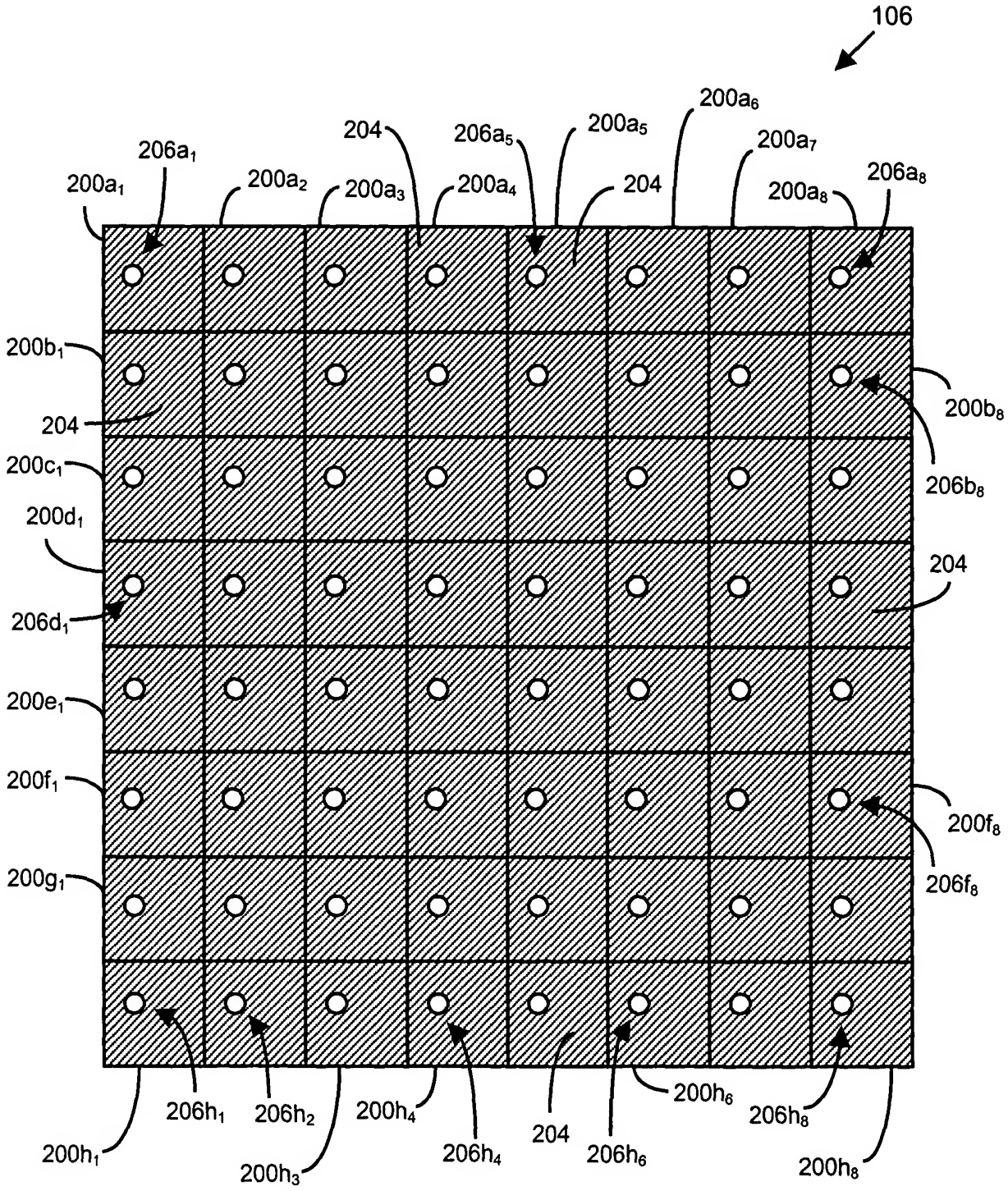

106
200a6
204
206a5
200a5
206a1
200a7
206a8
200a1
200a2
200a3
200a4
204
200a8
200b1
200b8
204
206b8
200c1
200d1
204
206d1
200e1
200f1
200f8
206f8
200g1
200h6
206h1
206h2
200h4
204
206h8
200h1
206h4
206h6
200h3
200h8

FIGURE 5

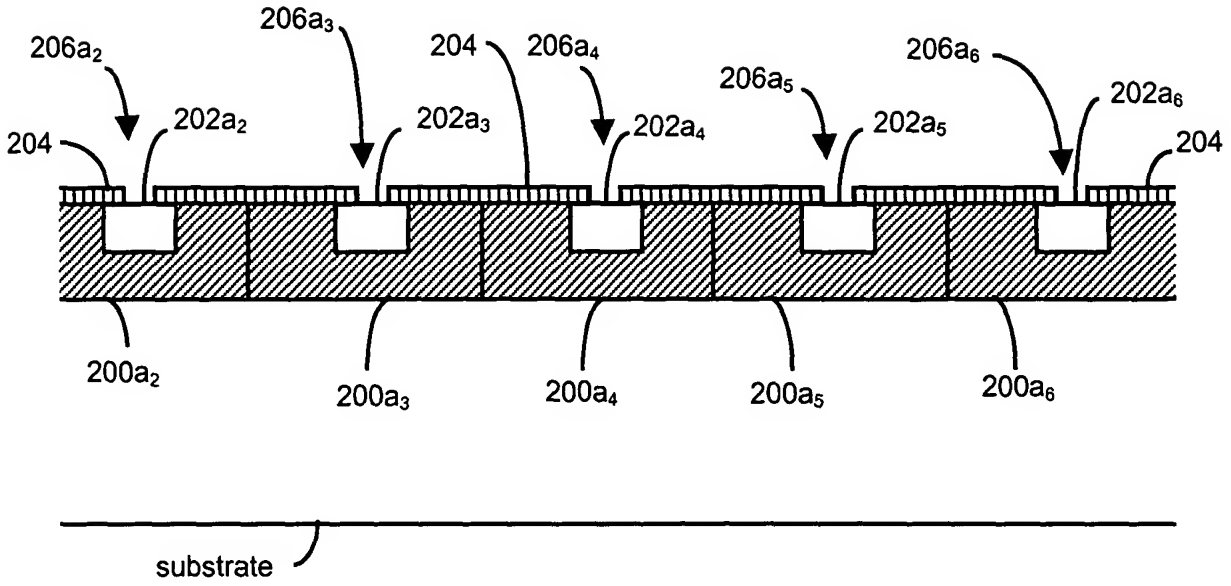


FIGURE 6A

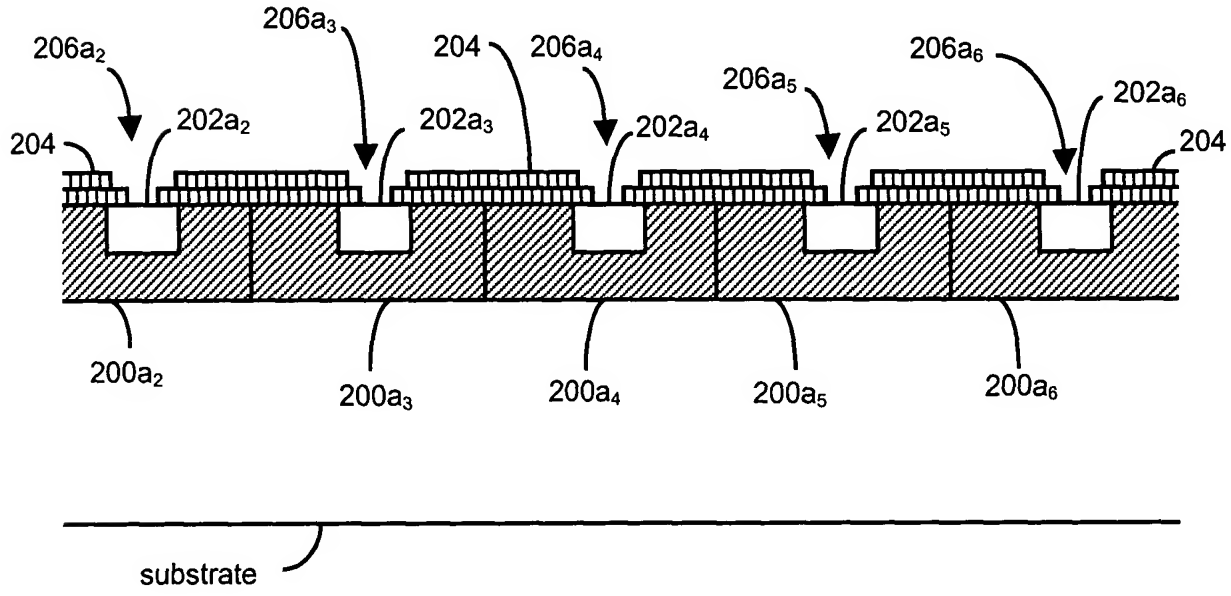


FIGURE 6B

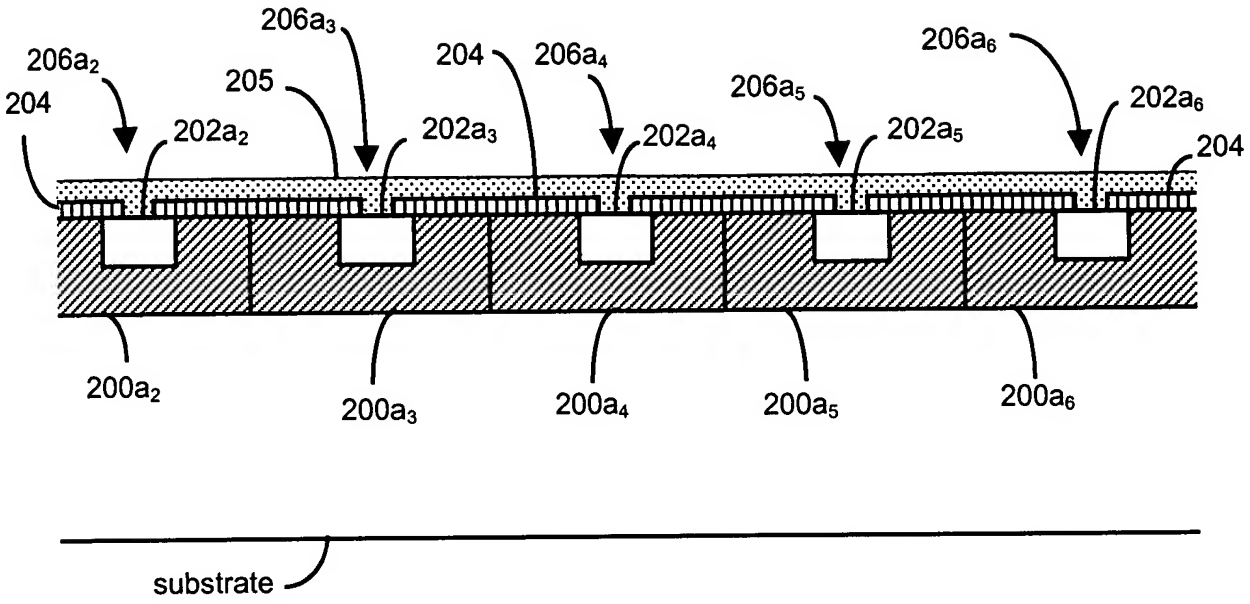


FIGURE 7A

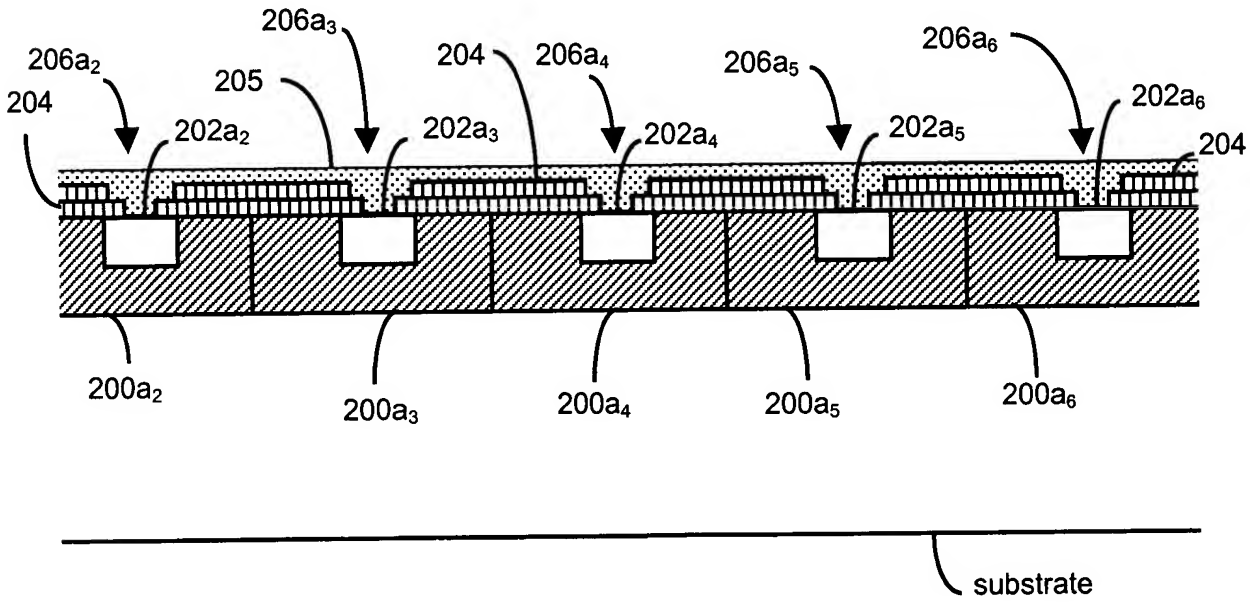


FIGURE 7B

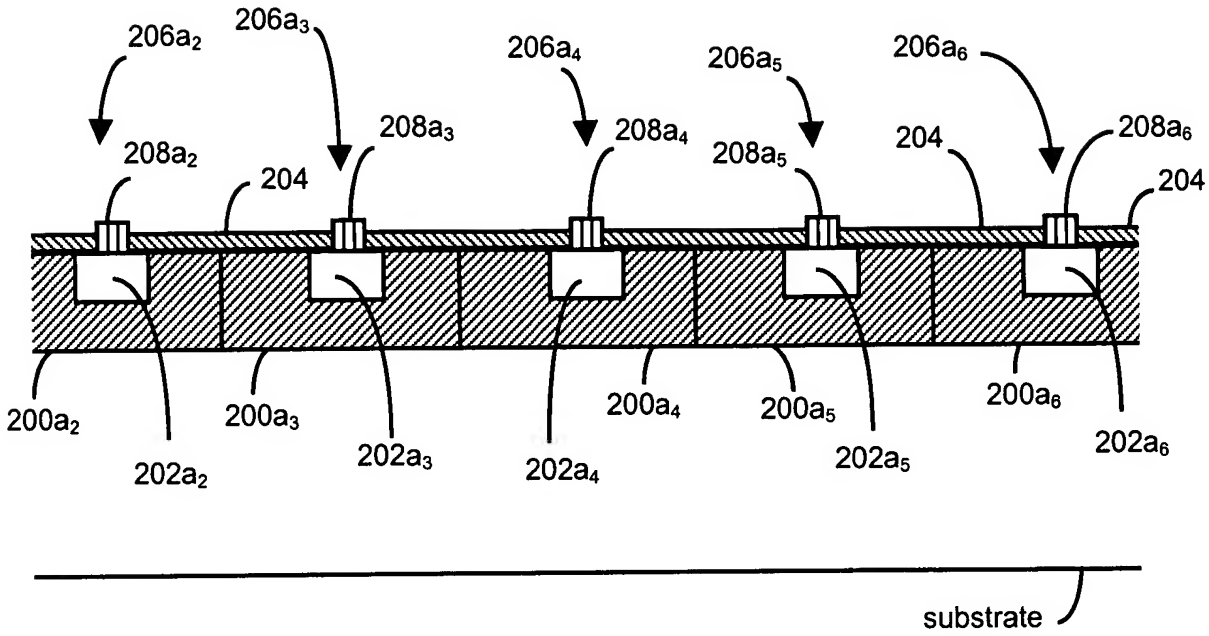


FIGURE 8A

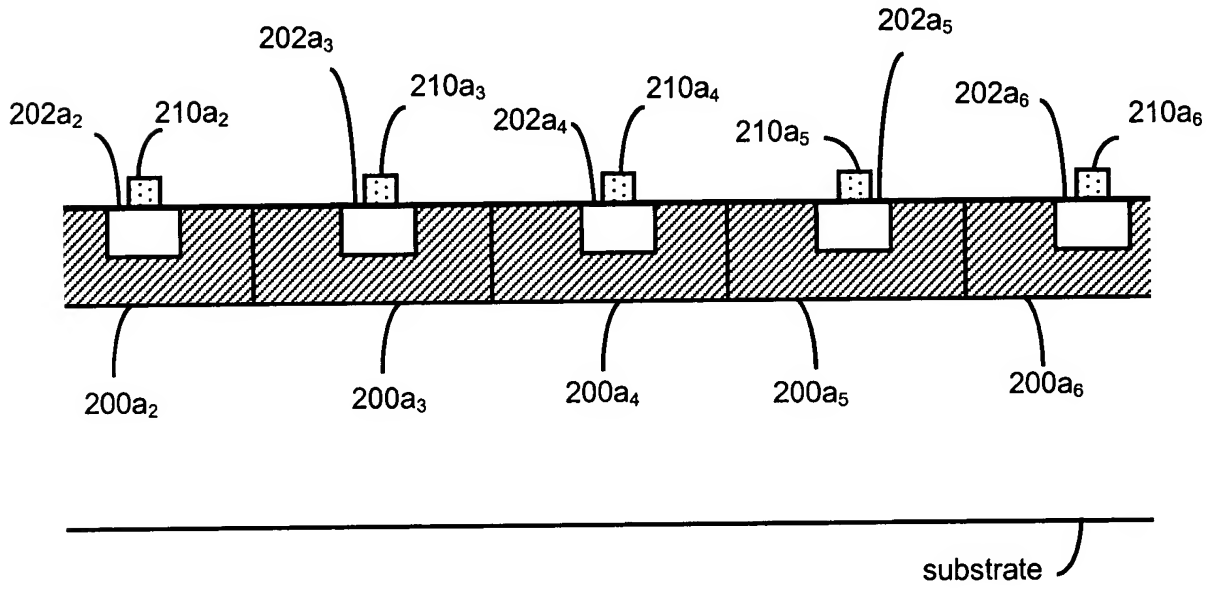


FIGURE 8B

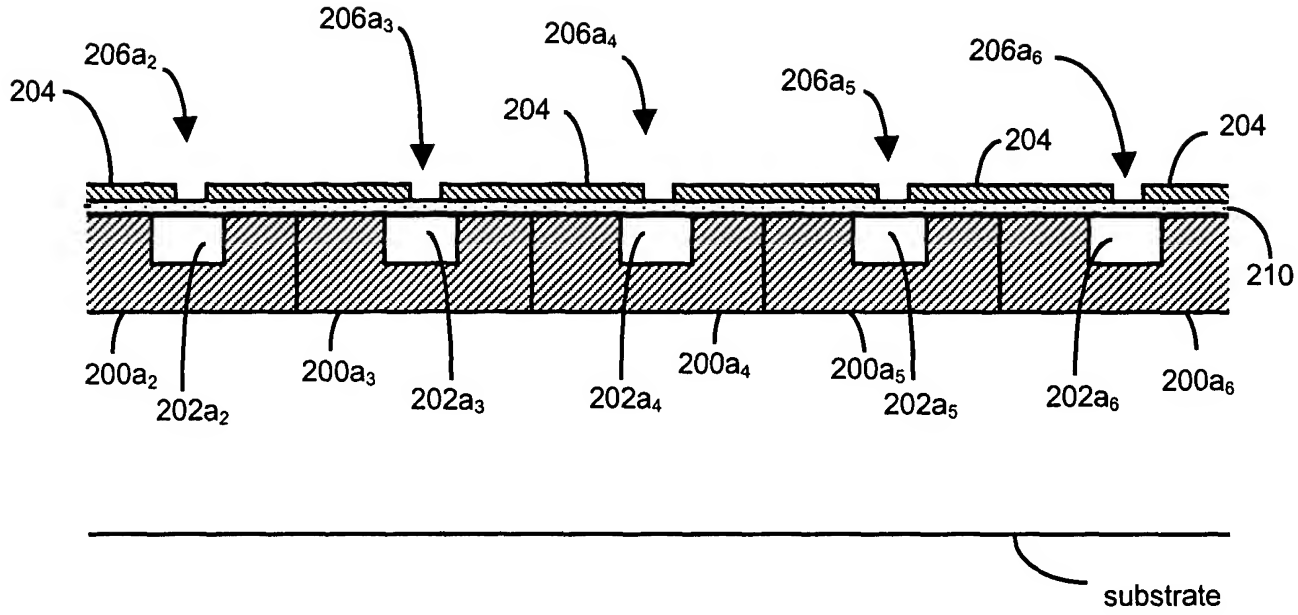


FIGURE 9A

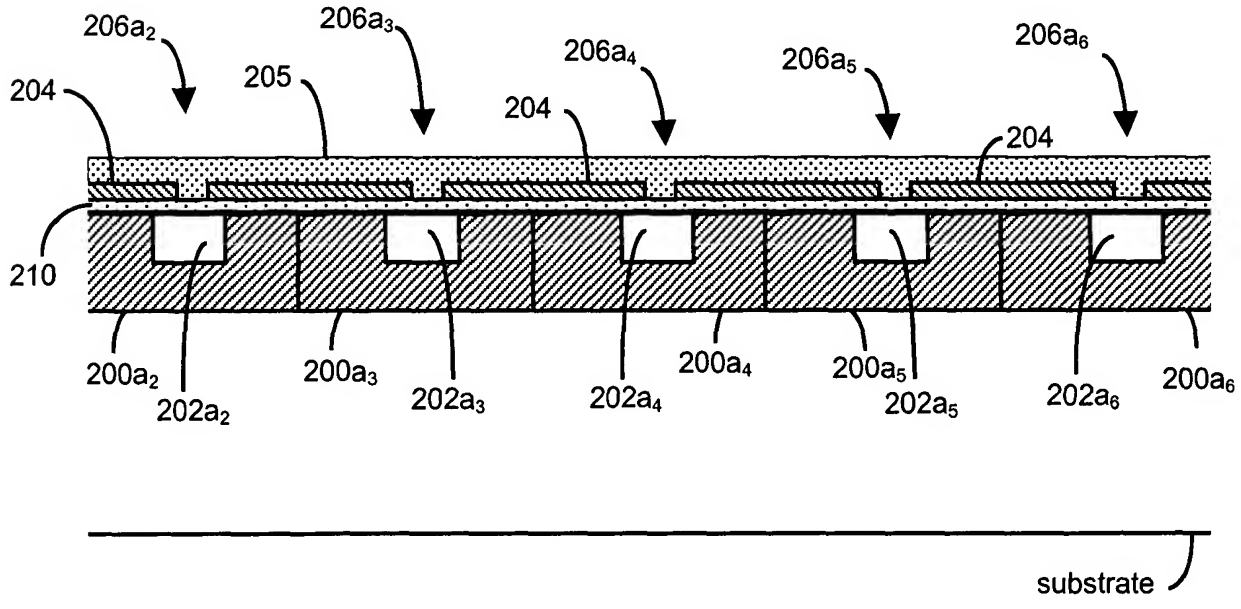


FIGURE 9B

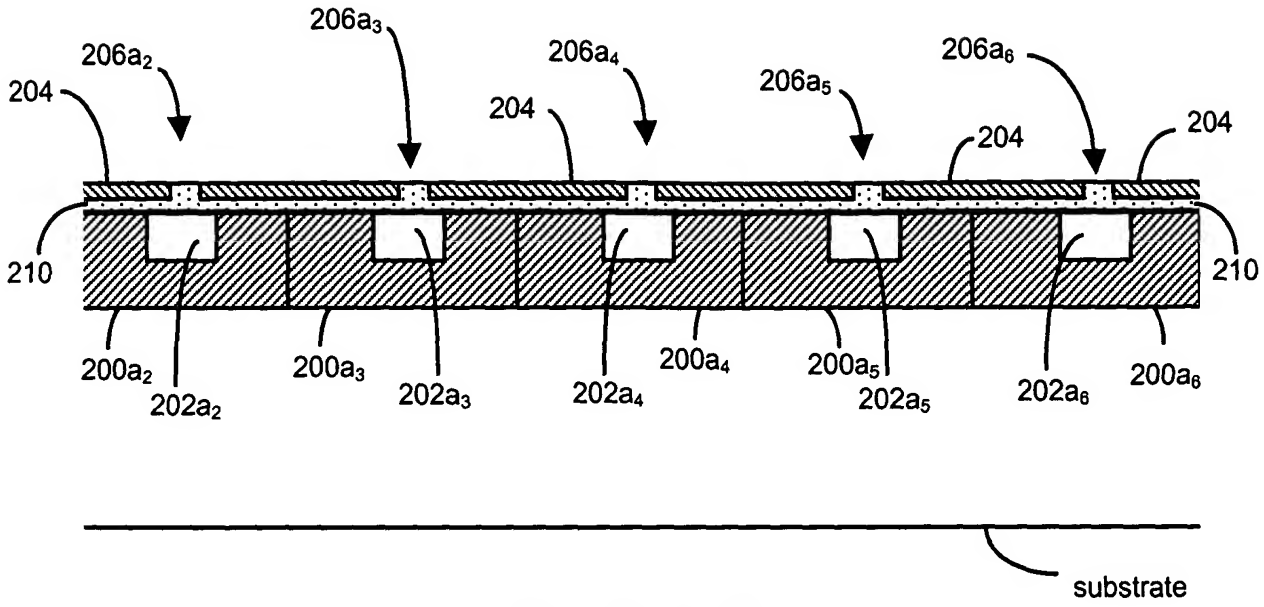


FIGURE 9C

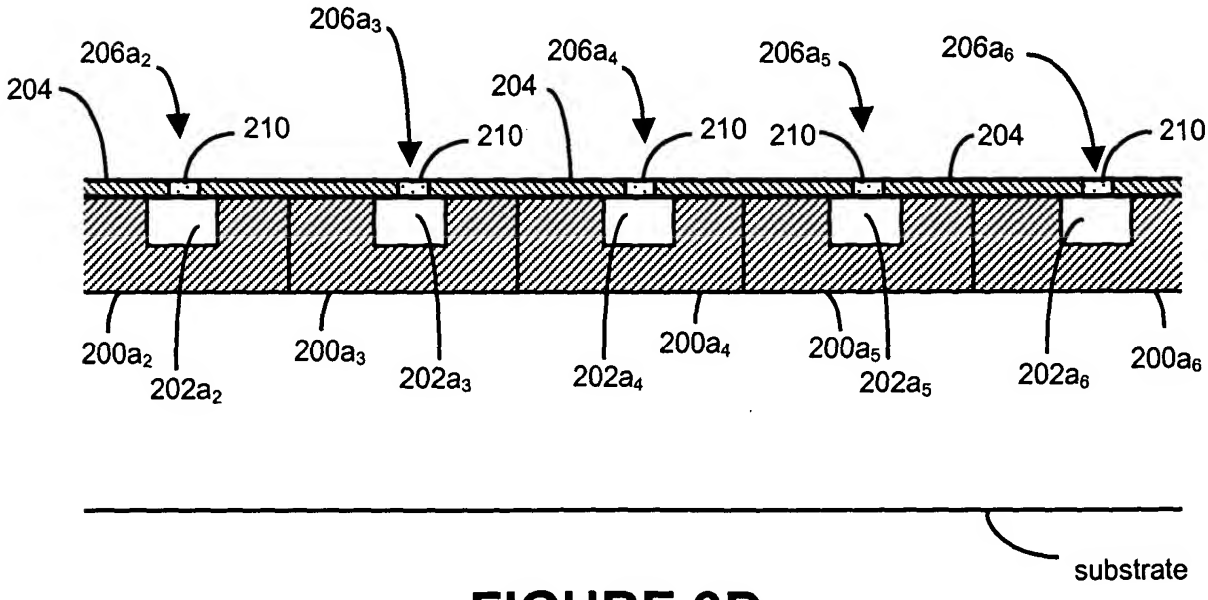


FIGURE 9D

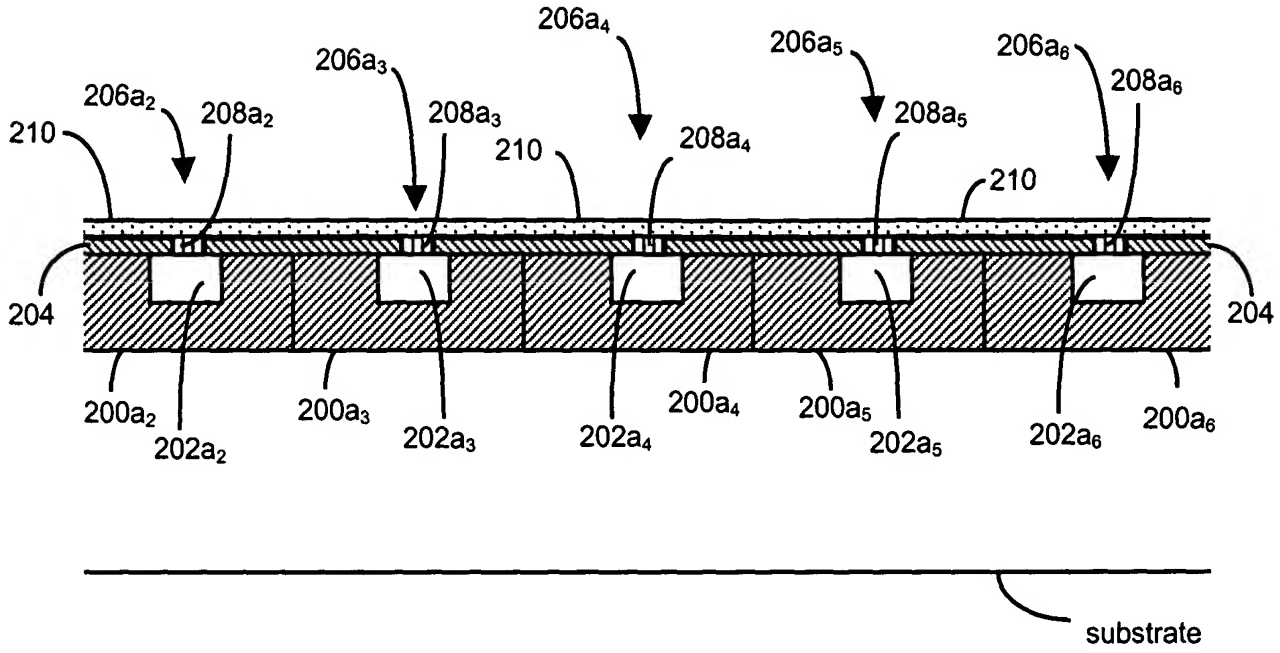


FIGURE 10

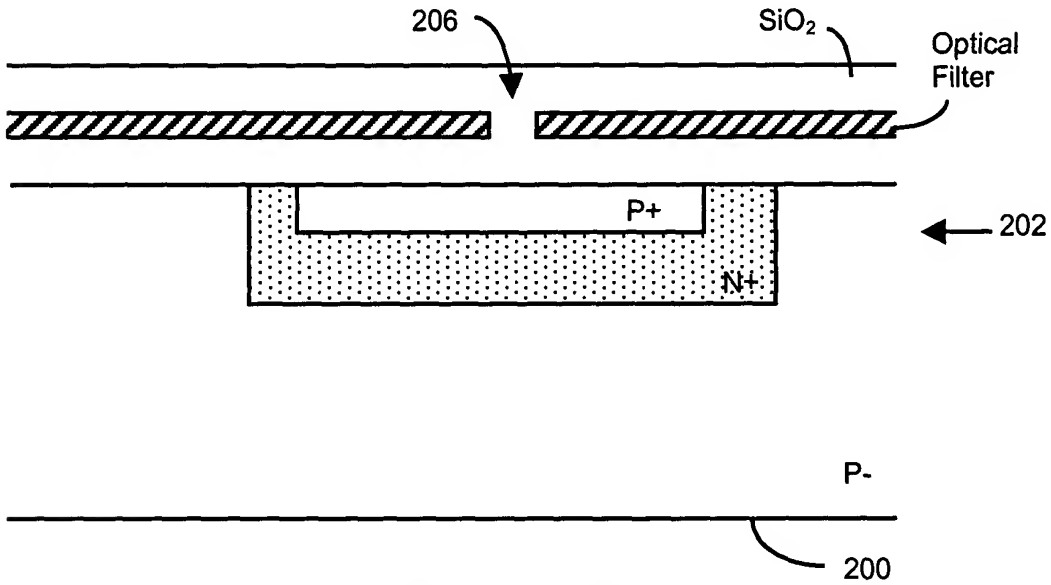


FIGURE 11A

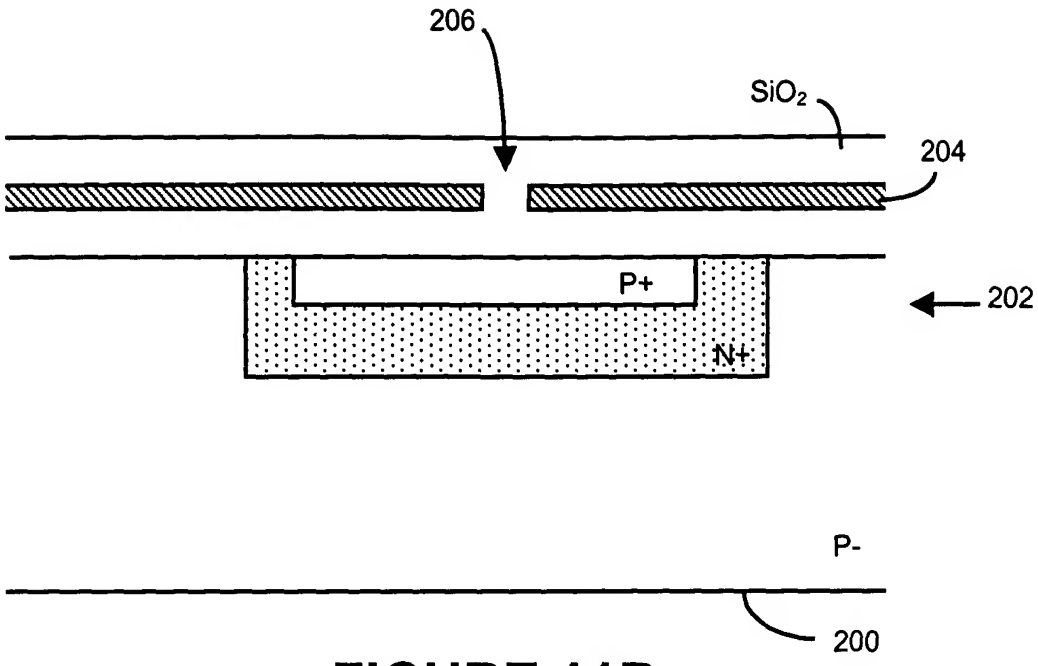


FIGURE 11B

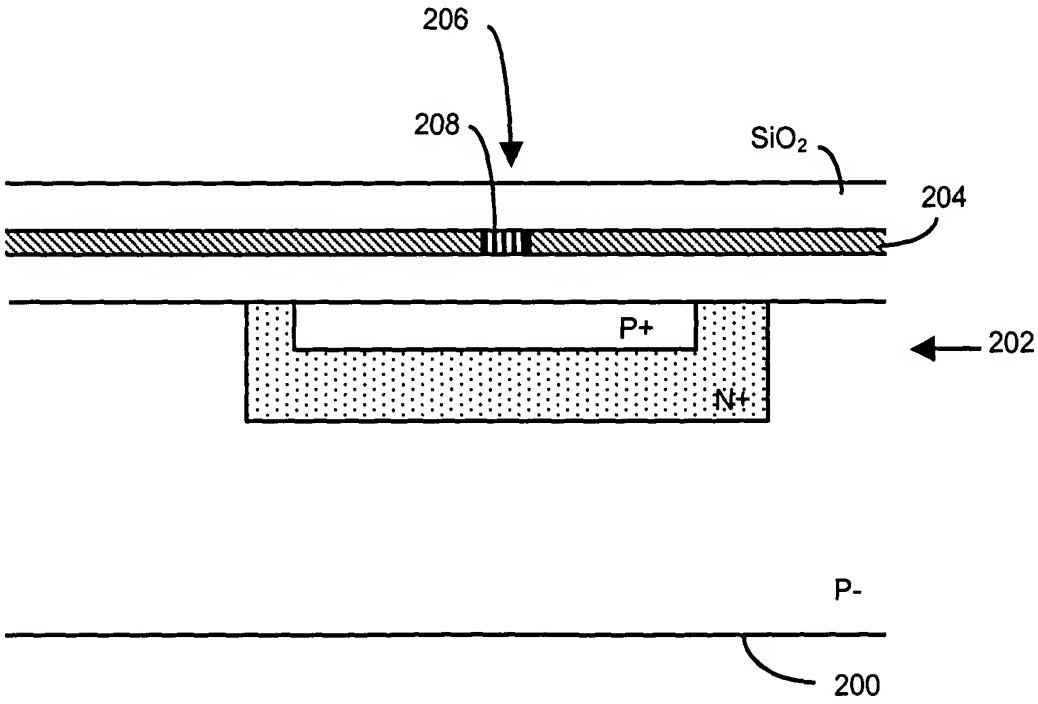
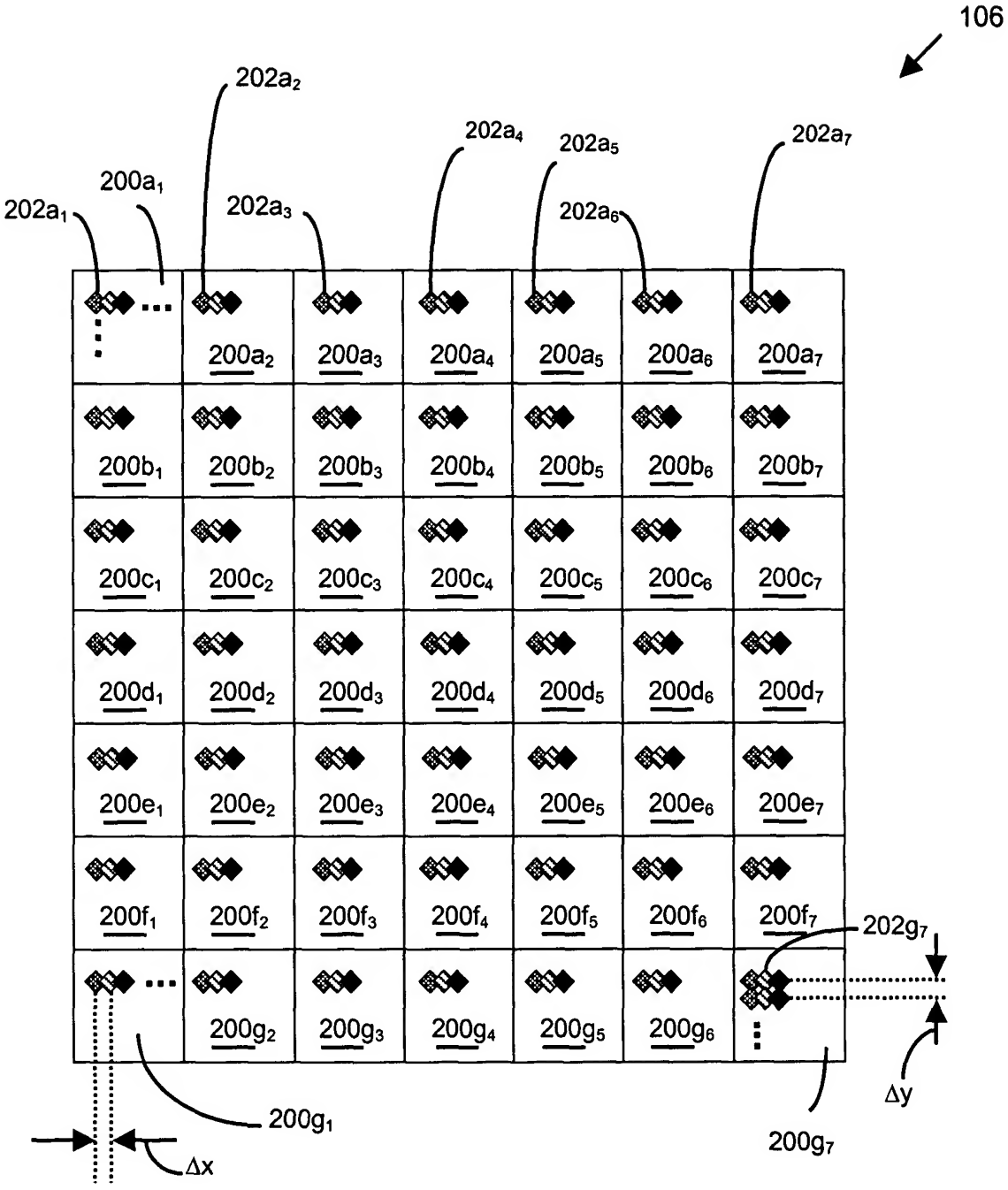


FIGURE 11C


106
202a2
202a4
202a5
202a7
200a1
202a1
202a3
202a6
200a2
200a3
200a4
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200a6
200a7
200b1
200b2
200b3
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200b7
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200c2
200c3
200c4
200c5
200c6
200c7
200d1
200d2
200d3
200d4
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200d6
200d7
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200e3
200e4
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200e6
200e7
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200f2
200f3
200f4
200f5
200f6
200f7
202g7
200g2
200g3
200g4
200g5
200g6
200g1
200g7
Δy
Δx

FIGURE 12A

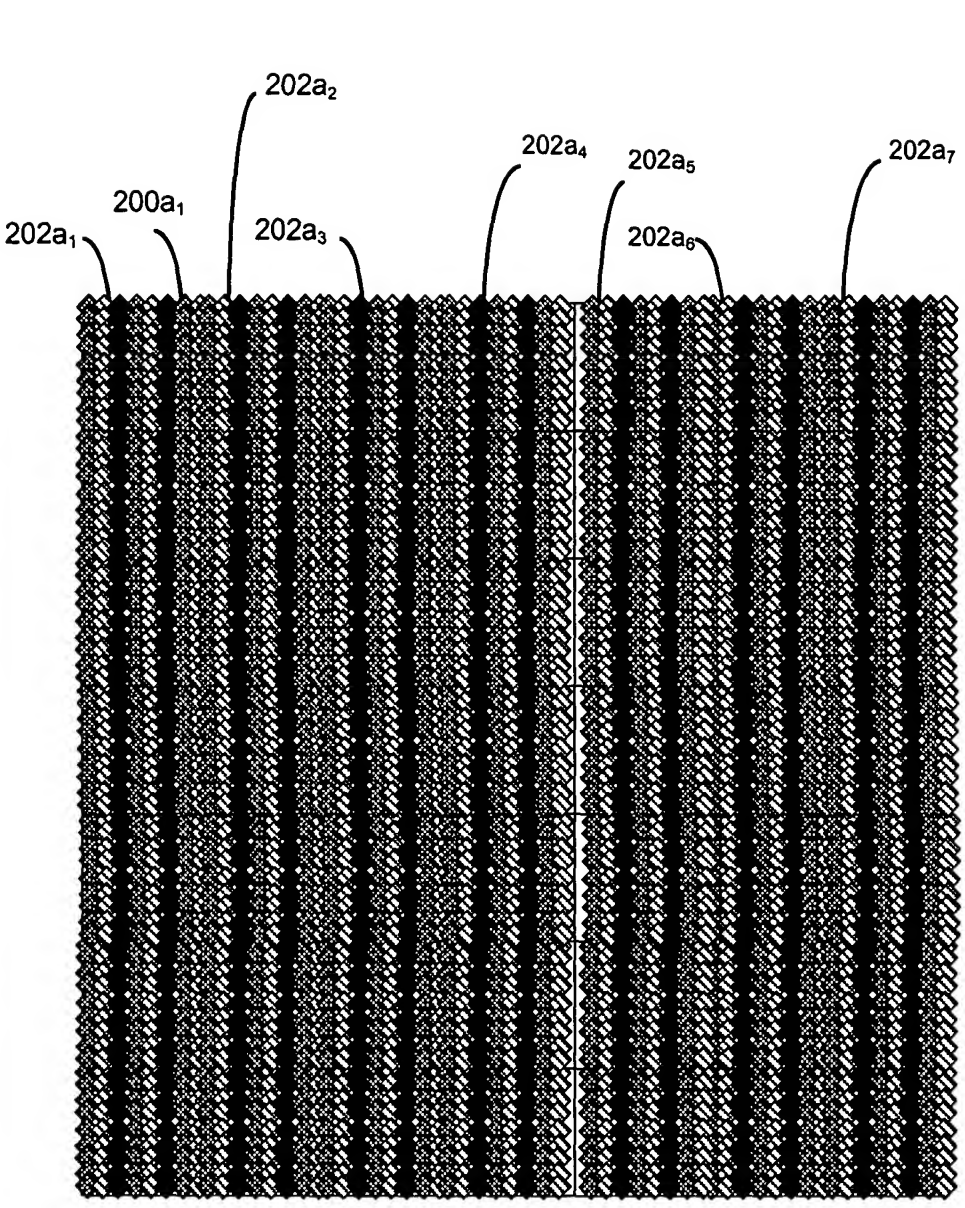


FIGURE 12B

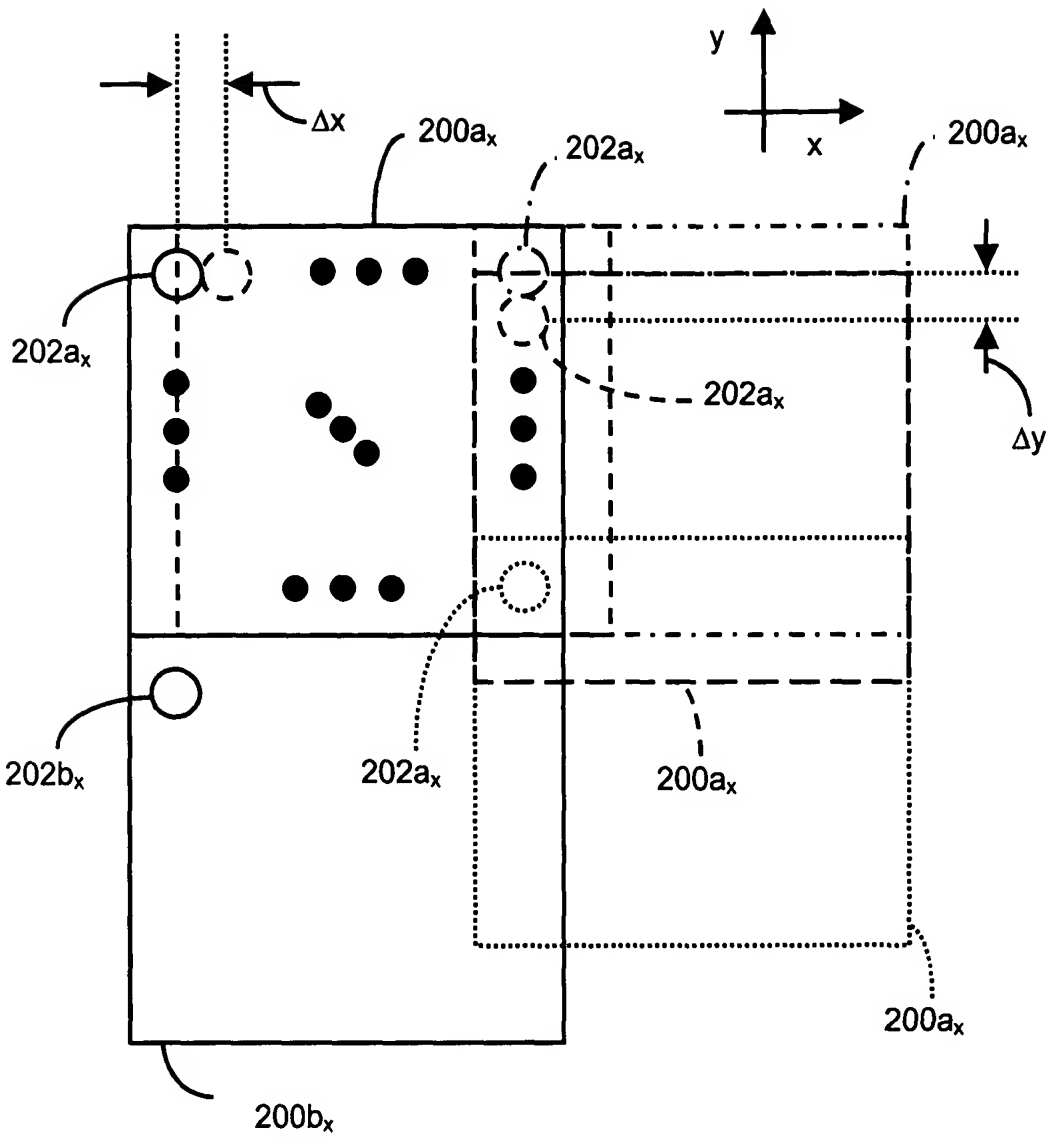

y
x
Δx
200a$_x$
202a$_x$
200a$_x$
202a$_x$
202a$_x$
Δy
202b$_x$
202a$_x$
200a$_x$
200a$_x$
200b$_x$

FIGURE 12C

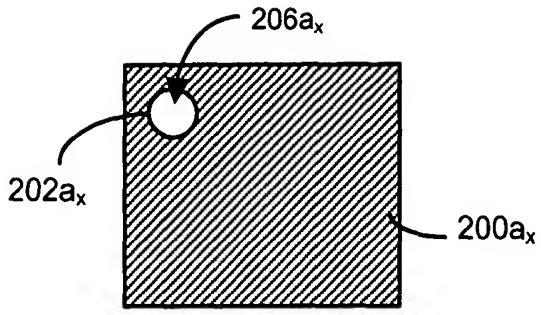


FIGURE 13A

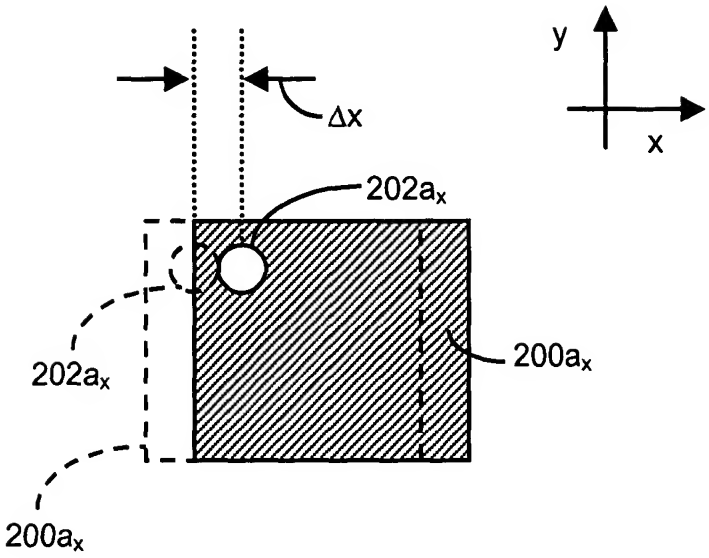


FIGURE 13B

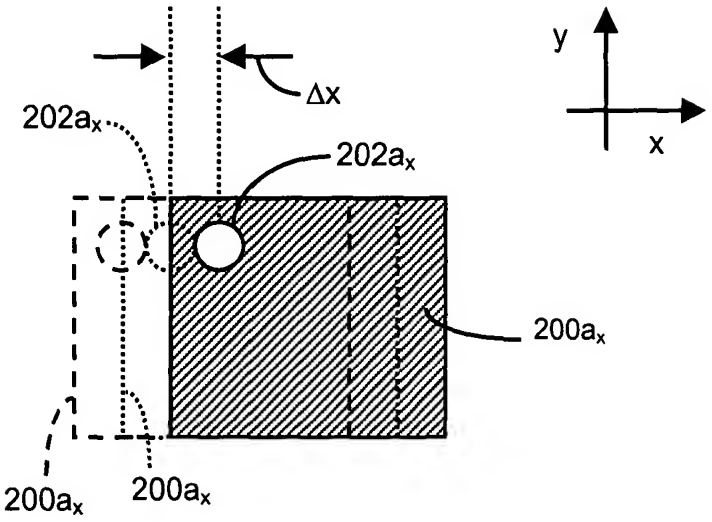


FIGURE 13C

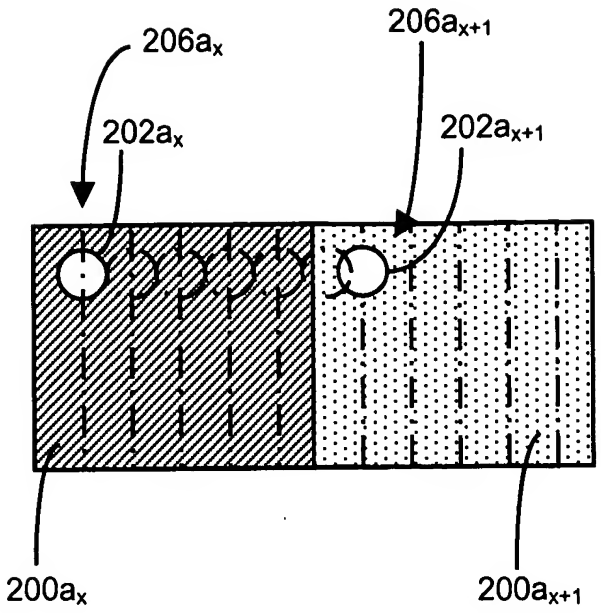


FIGURE 13D

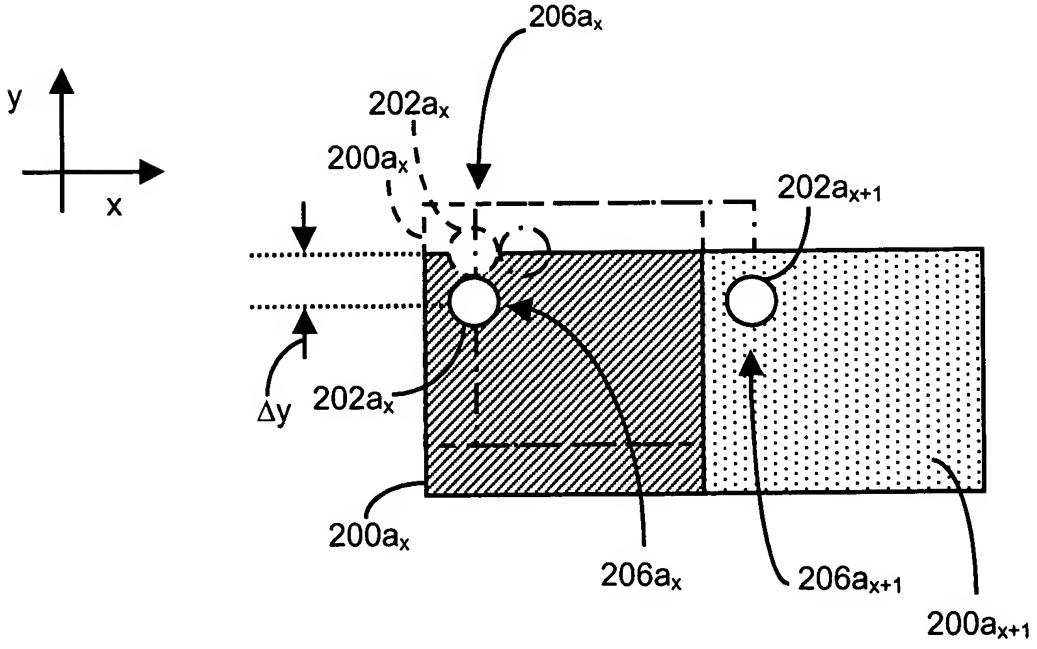


FIGURE 13E

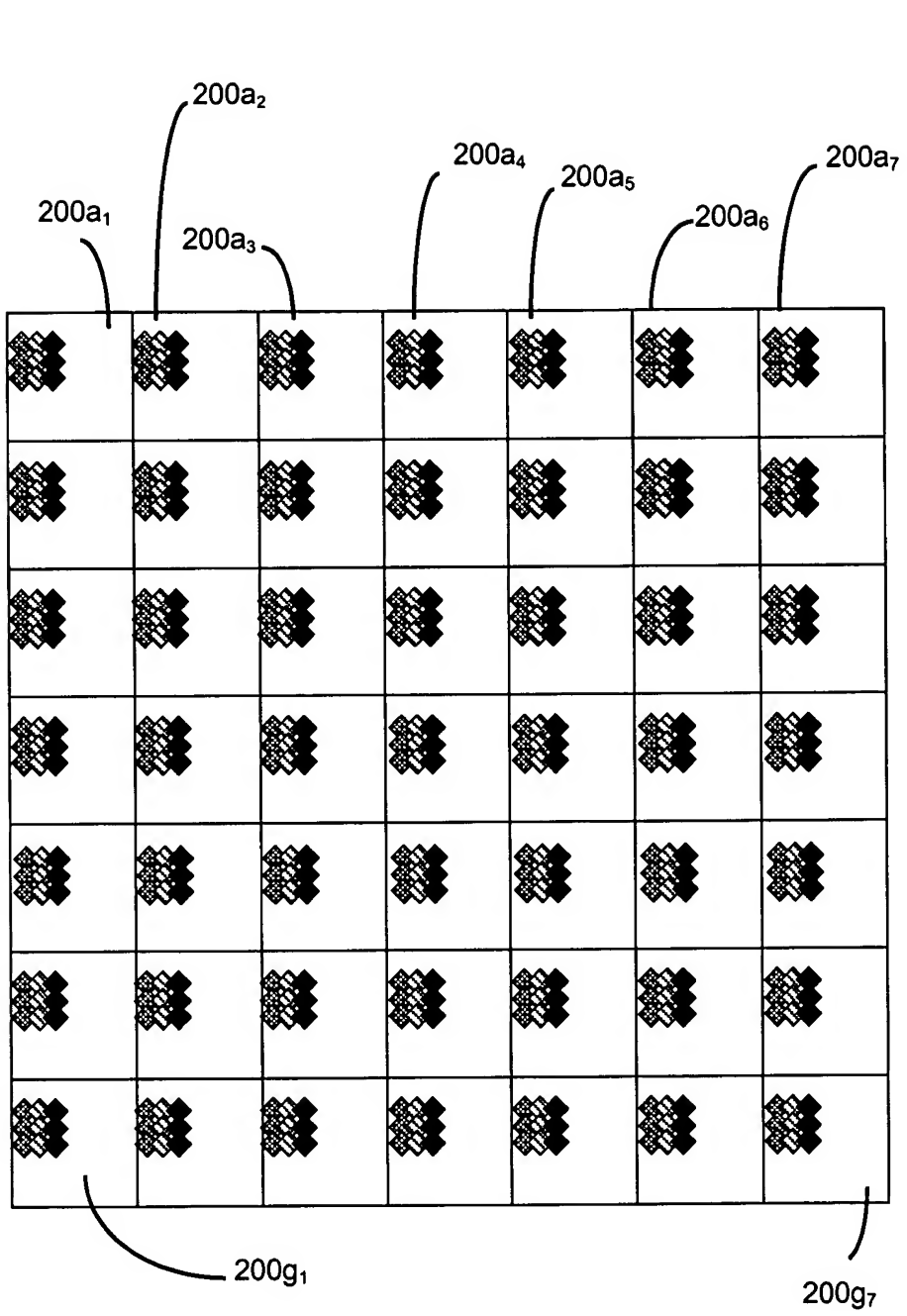


FIGURE 14A

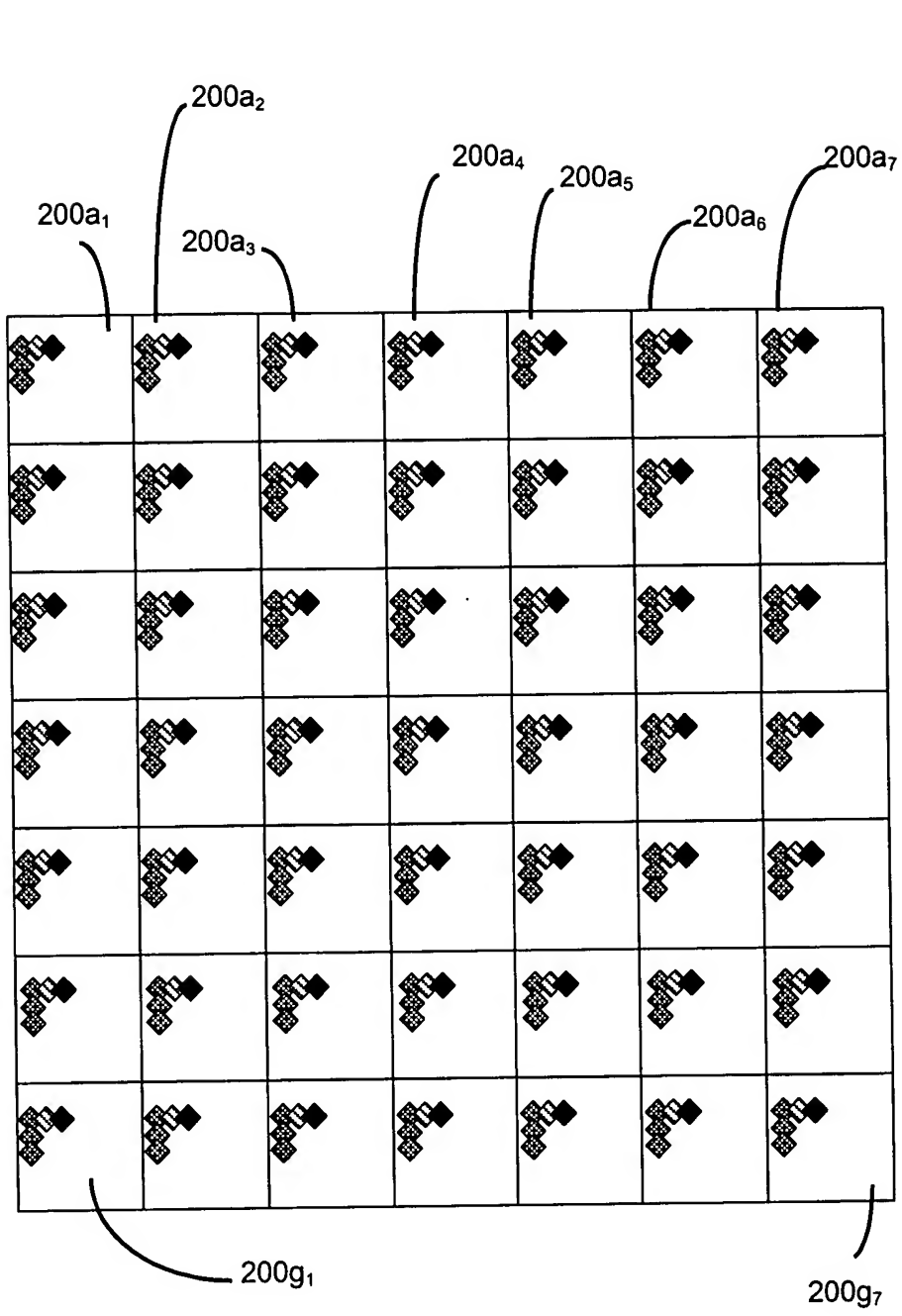


FIGURE 14B

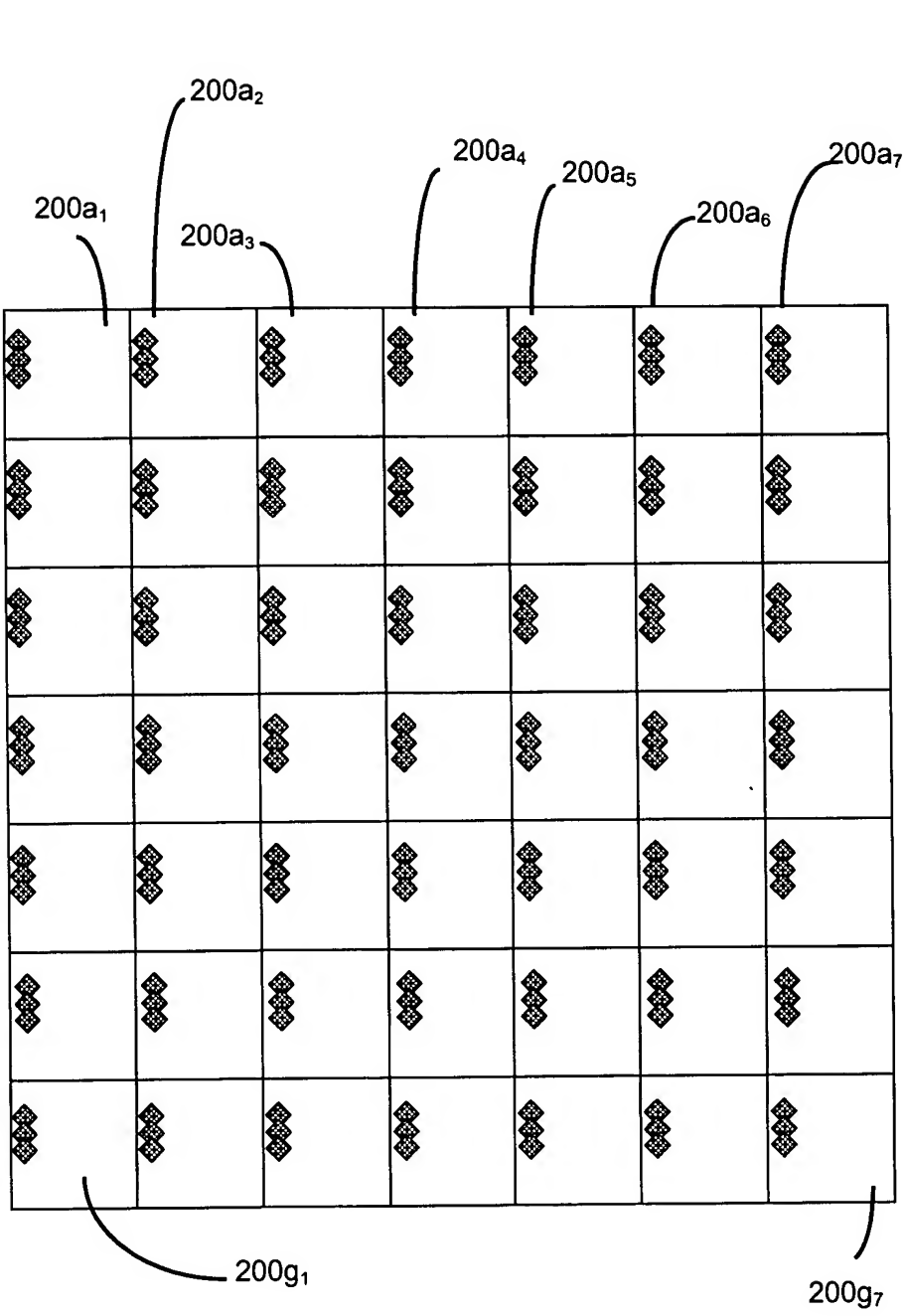


FIGURE 14C

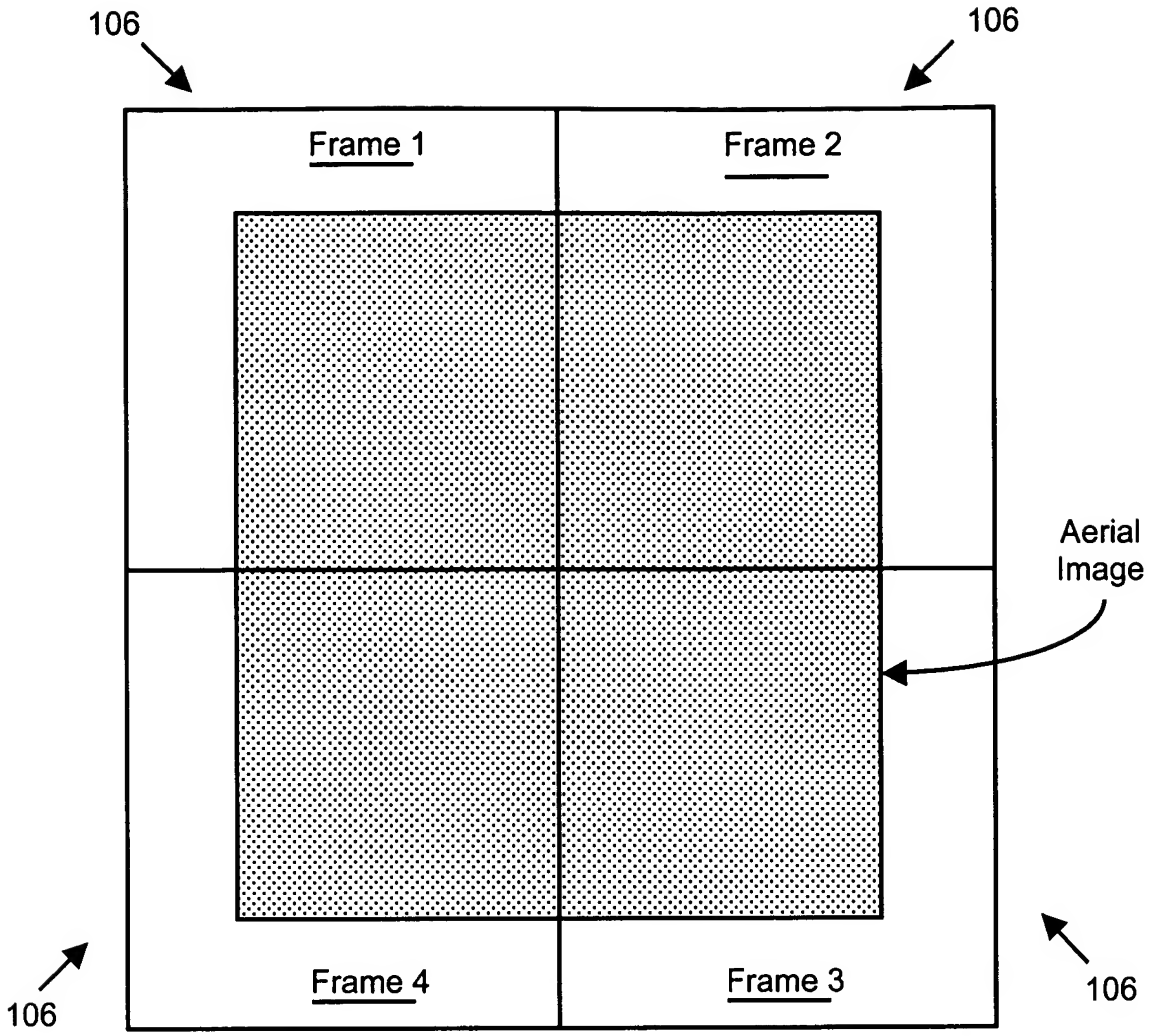


FIGURE 15A

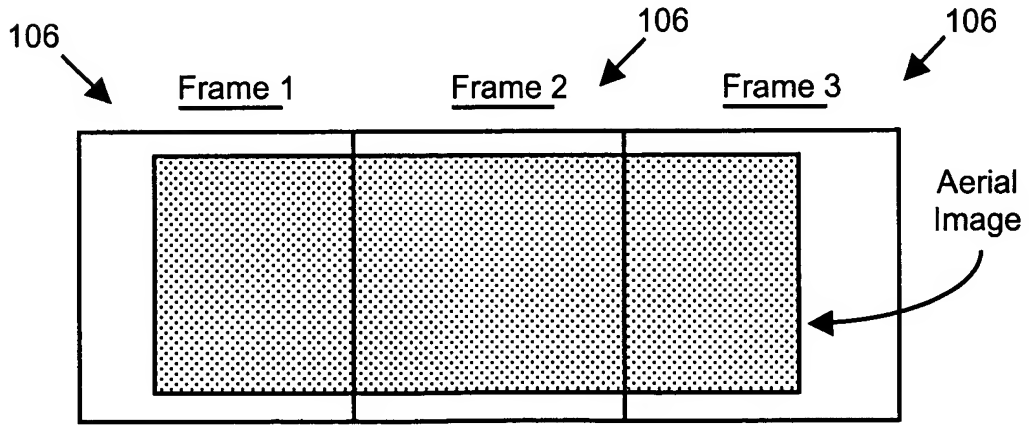


FIGURE 15B

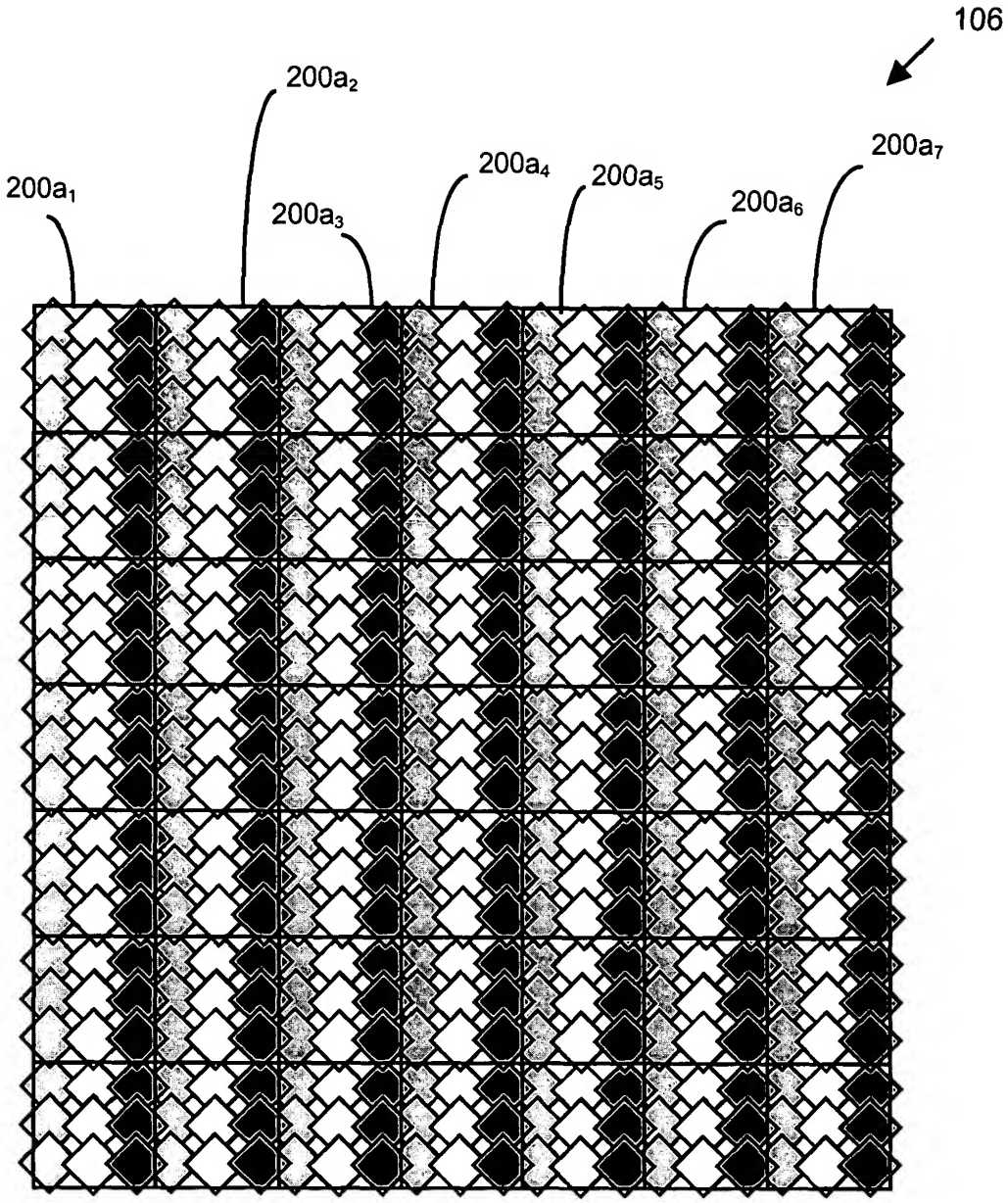


FIGURE 16

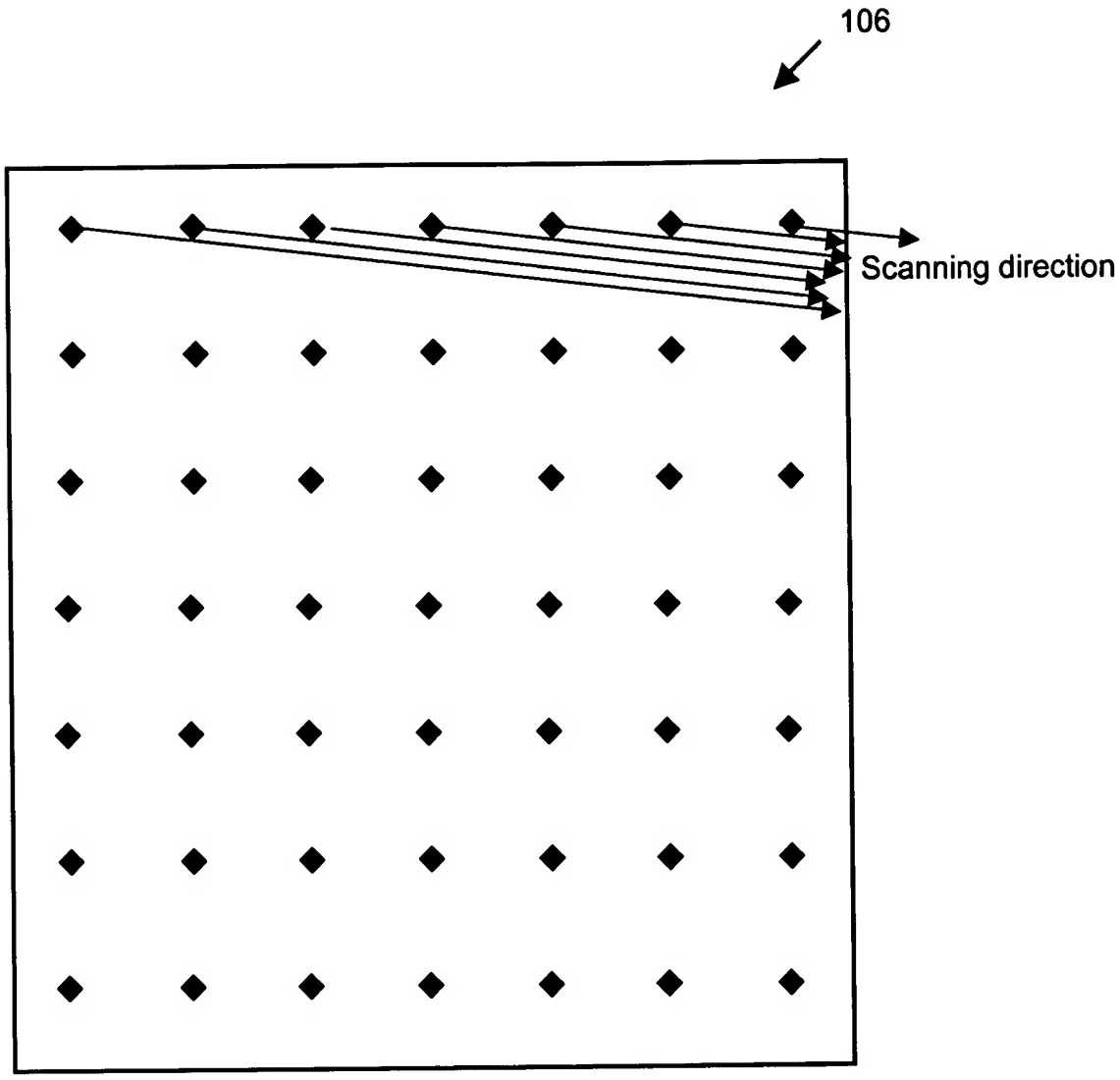


FIGURE 17

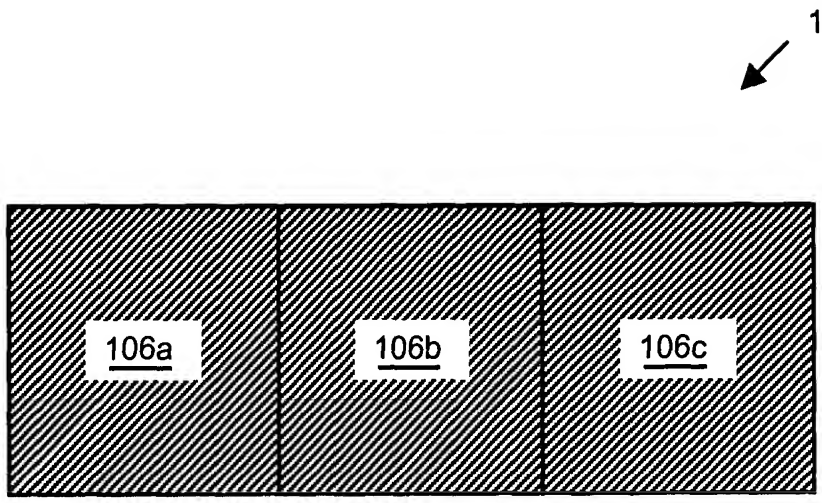


FIGURE 18A

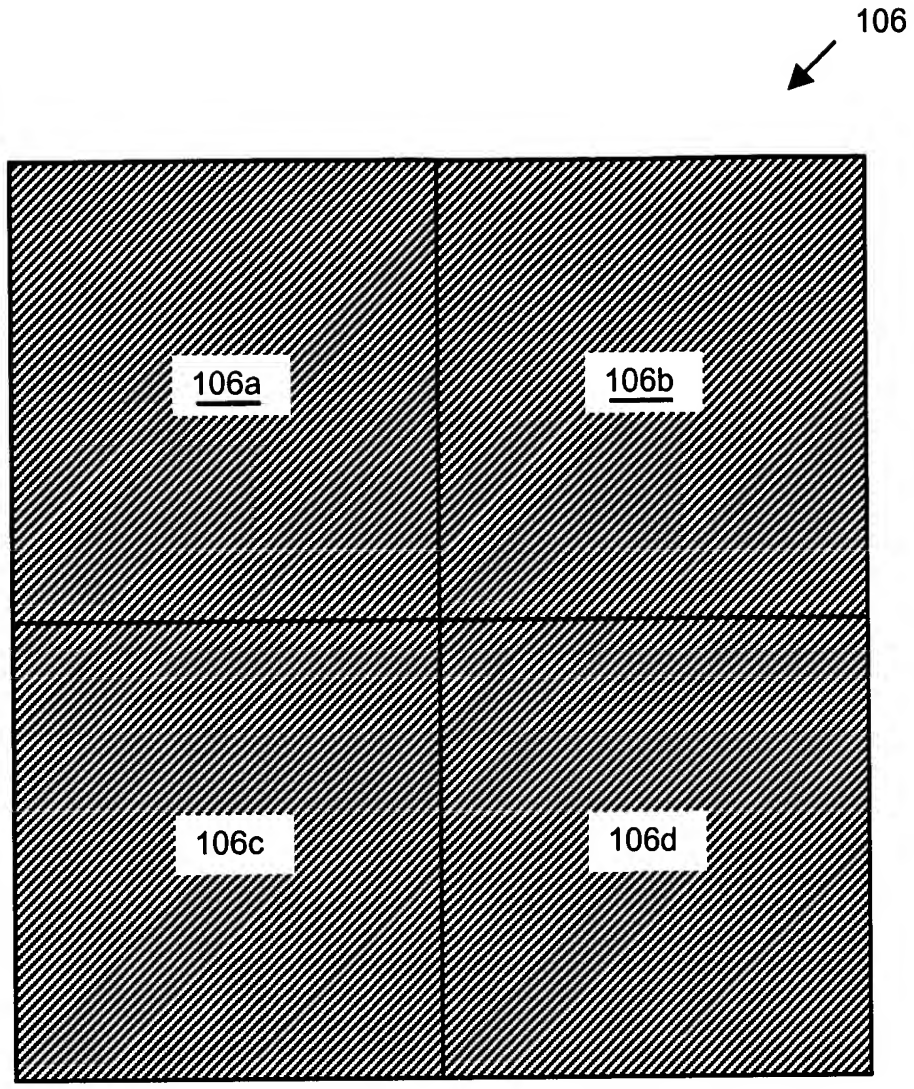
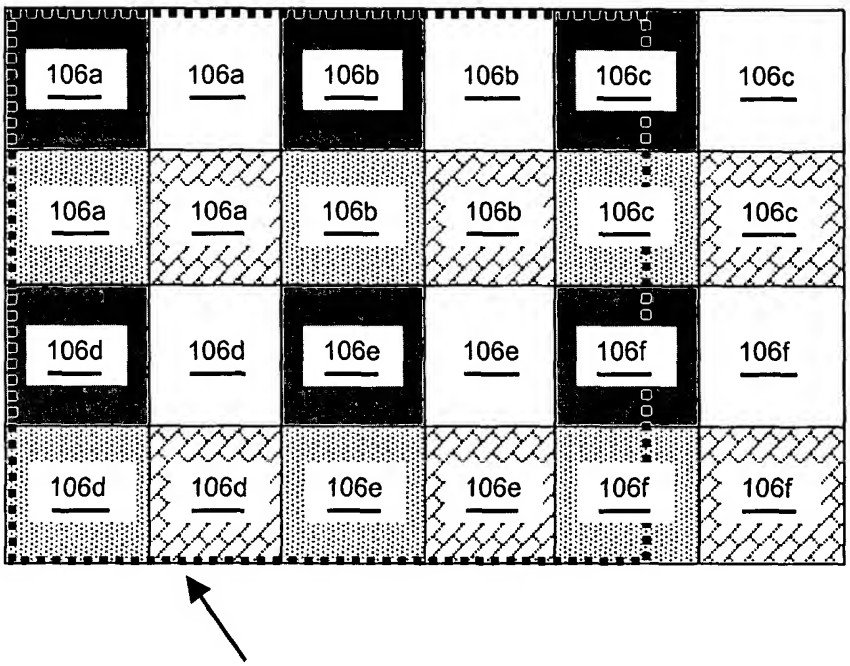


FIGURE 18B



Dashed box represents the full field

FIGURE 19

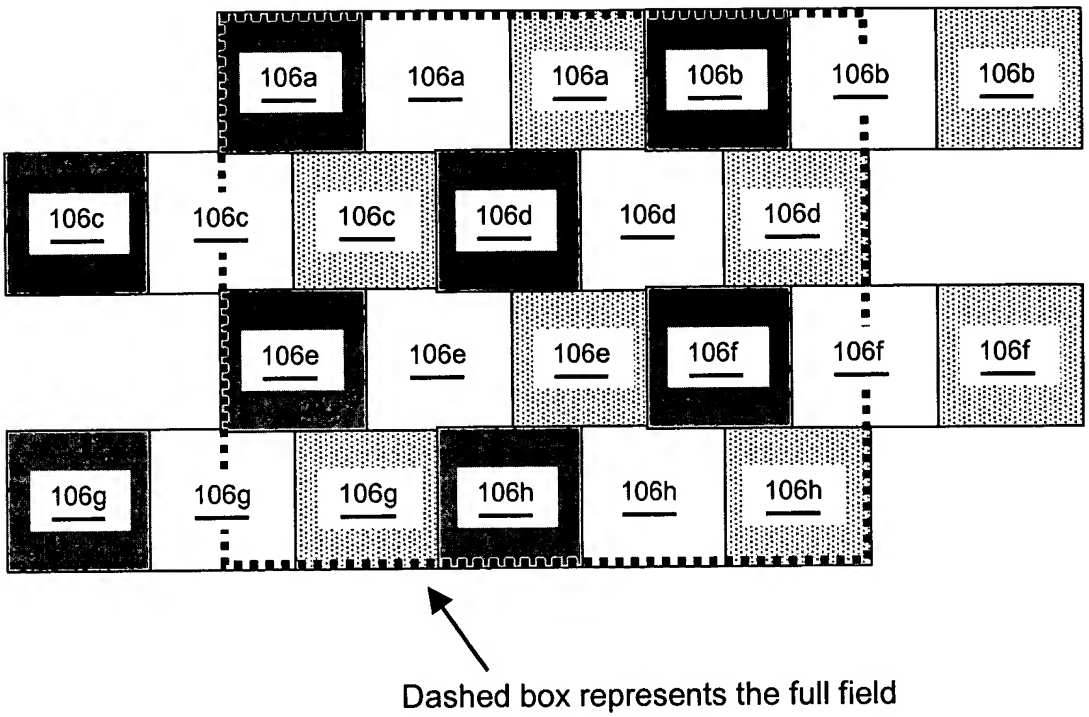

106a
106a
106a
106b
106b
106b
106c
106c
106c
106d
106d
106d
106e
106e
106e
106f
106f
106f
106g
106g
106g
106h
106h
106h
Dashed box represents the full field

FIGURE 20